

Supplement

Effect of remdesivir post hospitalization for COVID-19 infection from the randomized SOLIDARITY Finland trial

Supplementary Table 1. EQ-5D-5L responses in long-term follow-up of patients who received remdesivir in the acute phase of COVID-19 infection (pages 2-3)

Supplementary Table 2. Dichotomized EQ-5D-5L responses as analysed (page 4)

Supplementary Table 3. Symptoms after one year of hospitalization between treatment arms (pages 5-7)

Supplementary Table 4. The effect of remdesivir plus standard of care compared to standard of care only on self-reported symptoms after one year from hospitalization due to COVID-19 infection (page 8)

Supplementary Table 5. The effect of remdesivir plus standard of care compared to standard of care only on recovery, stratified by the need of oxygen therapy during hospital admission (page 9)

Code (page 9)

Supplementary Table 1. EQ-5D-5L responses in long-term follow-up of patients who received remdesivir in the acute phase of COVID-19 infection

	Remdesivir, n=98 (%)	SoC, n=83 (%)	Both, n=181 (%)
Mobility			
1) No problems	58 (59.2)	56 (67.5)	114 (63)
2) Slight problems	23 (23.5)	13 (15.7)	36 (19.9)
3) Moderate problems	10 (10.2)	8 (9.6)	18 (9.9)
4) Severe problems	5 (5.1)	6 (7.2)	11 (6.1)
5) Unable to walk	2 (2.0)	0	2 (1.1)
Self-care			
1) No problems	89 (90.8)	73 (88.0)	162 (89.5)
2) Slight problems	6 (6.1)	5 (6.0)	11 (6.1)
3) Moderate problems	0	4 (4.8)	4 (2.2)
4) Severe problems	2 (2.0)	1 (1.2)	3 (1.7)
5) Unable to wash or dress	1 (1.0)	0	1 (0.6)
Usual activities			
1) No problems	66 (67.3)	57 (68.7)	123 (68.0)
2) Slight problems	22 (22.4)	14 (16.9)	36 (19.9)
3) Moderate problems	6 (6.1)	6 (7.2)	12 (6.6)
4) Severe problems	4 (4.1)	6 (7.2)	10 (5.5)
5) Unable to do usual activities	0	0	0
Pain / discomfort			
1) No pain	48 (49)	35 (42.2)	83 (45.9)
2) Slight pain	35 (35.7)	33 (39.8)	68 (37.6)
3) Moderate pain	11 (11.2)	11 (13.3)	22 (12.2)
4) Severe pain	2 (2.0)	3 (3.6)	5 (2.8)
5) Extreme pain	2 (2.0)	1 (1.2)	3 (1.7)
Anxiety / depression			
1) No	65 (66.3)	57 (68.7)	122 (67.4)
2) Slight	24 (24.5)	20 (24.1)	44 (24.3)
3) Moderate	7 (7.1)	3 (3.6)	10 (5.5)

4) Severe	1 (1.0)	3 (3.6)	4 (2.2)
5) Extreme	1 (1.0)	0	1 (0.6)
<p>- EQ-5D, mobility: One patient reported both 3-4 and was classified as 4. One patient reported both 1-2 and was classified as 2.</p> <p>- EQ-5D, self-care: One patient reported both 3-4 and was treated as 4.</p> <p>- EQ-5D, pain: One patient reported both 1-2 and was classified as 2.</p>			

Supplementary Table 2. Dichotomized EQ-5D-5L responses as analysed			
	Remdesivir, n=98 (%)	SoC, n=83 (%)	Both, n=181 (%)
Mobility			
Outcomes 1-2	81 (82.7)	69 (83.1)	150 (82.9)
Outcomes 3-5	17 (17.3)	14 (16.9)	31 (17.1)
Self-care			
Outcomes 1-2	95 (96.9)	78 (94)	173 (95.6)
Outcomes 3-5	3 (3.1)	5 (6.0)	8 (4.4)
Usual activities			
Outcomes 1-2	88 (89.7)	71 (85.5)	159 (87.8)
Outcomes 3-5	10 (10.2)	12 (14.5)	22 (12.2)
Pain /discomfort			
Outcomes 1-2	83 (84.7)	68 (81.9)	151 (83.4)
Outcomes 3-5	15 (15.3)	15 (18.1)	30 (16.6)
Anxiety /depression			
Outcomes 1-2	89 (90.8)	77 (92.8)	166 (91.7)
Outcomes 3-5	9 (9.1)	6 (7.2)	15 (8.3)

Supplementary Table 3. Symptoms after one year of hospitalization between treatment arms				
	No symptom (0)	Mild symptom (1)	Moderate symptom (2)	Severe symptom (3)
Temperature				
- Remdesivir, n (%)	91 (92.9)	7 (7.1)	0	0
- Standard of care, n (%)	77 (92.8)	6 (7.2)	0	0
- Total, n (%)	168 (92.8)	13 (7.2)	0	0
Fatigue				
- Remdesivir, n (%)	42 (42.9)	32 (32.7)	17 (17.3)	7 (7.1)
- Standard of care, n (%)	37 (44.6)	23 (27.7)	13 (15.7)	10 (12.0)
- Total, n (%)	79 (43.6)	55 (30.4)	30 (16.6)	17 (9.4)
Problems with attention and concentration				
- Remdesivir, n (%)	50 (51)	30 (30.6)	8 (8.2)	10 (10.2)
- Standard of care, n (%)	47 (56.6)	21 (25.3)	9 (10.8)	6 (7.2)
- Total, n (%)	97 (53.6)	51 (28.2)	17 (9.4)	16 (8.8)
Memory difficulties and forgetting things				
- Remdesivir, n (%)	45 (45.9)	32 (32.7)	13 (13.3)	8 (8.2)
- Standard of care, n (%)	41 (49.4)	28 (33.7)	11 (13.3)	3 (3.6)
- Total, n (%)	86 (47.5)	60 (33.1)	24 (13.3)	11 (6.1)
Difficulty sleeping or falling asleep				
- Remdesivir, n (%)	52 (53.1)	32 (32.7)	6 (6.1)	8 (8.2)
- Standard of care, n (%)	53 (63.9)	14 (16.9)	11 (13.3)	5 (6.0)
- Total, n (%)	105 (58.0)	46 (25.4)	17 (9.4)	13 (7.2)
Depression, low spirits				
- Remdesivir, n (%)	66 (67.3)	20 (20.4)	9 (9.2)	3 (3.1)
- Standard of care, n (%)	50 (60.2)	22 (26.5)	6 (7.2)	5 (6.0)
- Total, n (%)	116 (64.1)	42 (23.2)	15 (8.3)	8 (4.4)
Mental anxiety, nervousness				
- Remdesivir, n (%)	65 (66.3)	21 (21.4)	9 (9.2)	3 (3.1)
- Standard of care, n (%)	59 (71.1)	13 (15.7)	7 (8.4)	4 (4.8)
- Total, n (%)	124 (68.5)	34 (18.8)	16 (8.8)	7 (3.9)

Dizziness, balance problems				
- Remdesivir, n (%)	70 (71.4)	21 (21.4)	5 (5.1)	2 (2.0)
- Standard of care, n (%)	57 (68.7)	20 (24.1)	0	6 (7.2)
- Total, n (%)	127 (70.2)	41 (22.7)	5 (2.8)	8 (4.4)
Headache				
- Remdesivir, n (%)	70 (71.4)	20 (20.4)	5 (5.1)	3 (3.1)
- Standard of care, n (%)	60 (72.3)	14 (16.9)	9 (10.8)	0
- Total, n (%)	130 (71.8)	34 (18.8)	14 (7.7)	3 (1.7)
Tinnitus				
- Remdesivir, n (%)	72 (73.5)	15 (15.3)	7 (7.1)	3 (3.1)
- Standard of care, n (%)	59 (71.1)	19 (22.9)	4 (4.8)	1 (1.2)
- Total, n (%)	131 (72.4)	34 (18.8)	11 (6.1)	4 (2.2)
^aSkin sensation disorders and tingling				
- Remdesivir, n (%)	70 (71.4)	18 (18.4)	5 (5.1)	5 (5.1)
- Standard of care, n (%)	61 (73.5)	17 (20.5)	5 (6.0)	0
- Total, n (%)	131 (72.4)	35 (19.3)	10 (5.5)	5 (2.8)
Change in the sense of smell and/or taste				
- Remdesivir, n (%)	76 (77.6)	13 (13.3)	6 (6.1)	3 (3.1)
- Standard of care, n (%)	63 (75.9)	16 (19.3)	3 (3.6)	1 (1.2)
- Total, n (%)	139 (76.8)	29 (16.0)	9 (5.0)	4 (2.2)
Prolonged general malaise following even light exertion				
- Remdesivir, n (%)	79 (80.6)	14 (14.3)	3 (3.1)	2 (2.0)
- Standard of care, n (%)	63 (75.9)	9 (10.8)	8 (9.6)	3 (3.6)
- Total	142 (78.5)	23 (12.7)	11 (6.1)	5 (2.8)
Cardiac arrhythmias or increased resting heart rate				
- Remdesivir, n (%)	66 (67.3)	24 (24.5)	6 (6.1)	2 (2.0)
- Standard of care, n (%)	57 (68.7)	16 (19.3)	7 (8.4)	3 (3.6)
- Total, n (%)	123 (68.0)	40 (22.1)	13 (7.2)	5 (2.8)
A feeling of pressure or discomfort in the chest				
- Remdesivir, n (%)	69 (70.4)	23 (23.5)	4 (4.1)	2 (2.0)

- Standard of care, n (%)	66 (79.5)	10 (12.0)	5 (6.0)	2 (2.4)
- Total	135 (74.6)	33 (18.2)	9 (5.0)	4 (2.2)
Nausea, queasiness				
- Remdesivir, n (%)	85 (86.7)	11 (11.2)	2 (2.0)	0
- Standard of care, n (%)	72 (86.7)	10 (12.0)	1 (1.2)	0
- Total, n (%)	157 (86.7)	21 (11.6)	3 (1.7)	0
Rash				
- Remdesivir, n (%)	82 (83.7)	13 (13.3)	2 (2.0)	1 (1.)
- Standard of care, n (%)	57 (68.7)	21 (25.3)	4 (4.8)	1 (1.2)
- Total, n (%)	139 (76.8)	34 (18.8)	6 (3.3)	2 (1.1)
Joint pain				
- Remdesivir, n (%)	55 (56.1)	20 (20.4)	18 (18.4)	5 (5.1)
- Standard of care, n (%)	45 (54.2)	21 (25.3)	14 (16.9)	3 (3.6)
- Total	100 (55.2)	41 (22.7)	32 (17.7)	8 (4.4)
Muscle pain				
- Remdesivir, n (%)	60 (61.2)	27 (27.6)	8 (8.2)	3 (3.1)
- Standard of care, n (%)	48 (57.8)	22 (26.5)	12 (14.5)	1 (1.2)
- Total, n (%)	181 (59.7)	49 (27.1)	20 (11.0)	4 (2.2)
Persistent weekly cough				
- Remdesivir, n (%)	72 (73.5)	13 (13.3)	12 (12.2)	1 (1.0)
- Standard of care, n (%)	62 (74.7)	9 (10.8)	9 (10.8)	3 (3.6)
- Total, n (%)	134 (74.0)	22 (12.2)	21 (11.6)	4 (2.2)
Persistent weekly respiratory mucus				
- Remdesivir, n (%)	68 (69.4)	8 (8.2)	20 (20.4)	2 (2.0)
- Standard of care, n (%)	51 (61.4)	16 (19.3)	13 (15.7)	3 (3.6)
- Total, n (%)	119 (65.7)	24 (13.3)	33 (18.2)	5 (2.8)
^a With skin rash, one patient, selected both 0 and 1, and is coded as 1.				

Supplementary Table 4. The effect of remdesivir plus standard of care compared to standard of care only on self-reported symptoms after one year from hospitalization due to COVID-19 infection

	Unadjusted odds ratio	95% confidence interval
Temperature	NA	NA
Problems with attention and concentration	1.02	0.55-1.89
Memory difficulties and forgetting things	1.27	0.69-2.34
Difficulty sleeping or falling asleep	0.74	0.39-1.43
Depression, low spirits	0.92	0.43-1.98
Mental anxiety, nervousness	0.92	0.43-1.98
Dizziness, balance problems	0.99	0.35-2.83
Headache	0.75	0.30-1.86
Tinnitus, i.e., ringing in the ear	1.71	0.61-4.81
Skin sensation disorders and tingling	1.69	0.61-4.76
Change in the sense of smell and/or taste	1.91	0.61-5.96
Prolonged general malaise following even light exertion	0.39	0.14-1.06
Cardiac arrhythmias or increased resting heart rate	0.68	0.28-1.64
A feeling of pressure or discomfort in the chest	0.73	0.25-2.08
Nausea, queasiness	1.69	0.16-19.18
Rash	0.51	0.13-2.06
Joint pain	1.15	0.66-2.00
Muscle pain	0.72	0.34-1.51
Persistent weekly cough	0.92	0.44-1.90
Persistent weekly respiratory mucus	1.16	0.66-2.07

Supplementary Table 5. The effect of remdesivir plus standard of care compared to standard of care only on recovery, stratified by the need of oxygen therapy during hospital admission

	Relative risk	95% confidence interval
Recovery in patients without oxygen during admission	0.88	0.65-1.18
Recovery in patients with oxygen during admission	1.03	0.90-1.17

Code

Statistical analysis was performed using RStudio. Binary outcomes were treated in a similar fashion as mortality at one year as shown below. The groups were standard of care (0) and standard of care plus remdesivir (1). The Epi-package was used.

```
library(Epi)
```

```
tmp.tab<-with(Mortality1y,t(table(Death=factor(Death1v,levels = 1:0,labels =
c("dead","alive")), Group=factor(Group,levels = 1:0) )))
```

```
twoby2(exposure=(tmp.tab))
```

```
## 2 by 2 table analysis:
## -----
## Outcome      : dead
## Comparing    : 1 vs. 0
##
##      dead alive      P(dead) 95% conf. interval
## 1      5    109      0.0439   0.0184    0.1011
## 0      5     89      0.0532   0.0223    0.1215
##
##
##                               95% conf. interval
##              Relative Risk:  0.8246    0.2461    2.7628
##              Sample Odds Ratio: 0.8165    0.2291    2.9099
## Conditional MLE Odds Ratio:  0.8173    0.1819    3.6725
##              Probability difference: -0.0093   -0.0793    0.0532
##
##              Exact P-value: 0.7575
##              Asymptotic P-value: 0.7546
## -----
```